



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

September 01, 2017

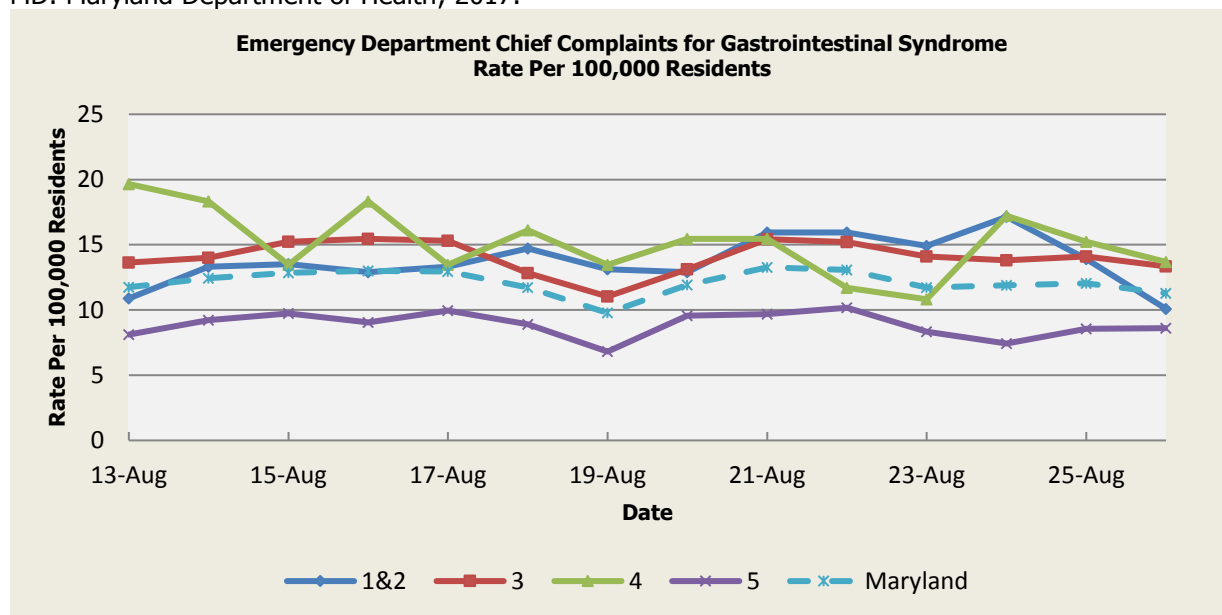
Public Health Preparedness and Situational Awareness Report: #2017:34 **Reporting for the week ending 08/26/17 (MMWR Week #34)**

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

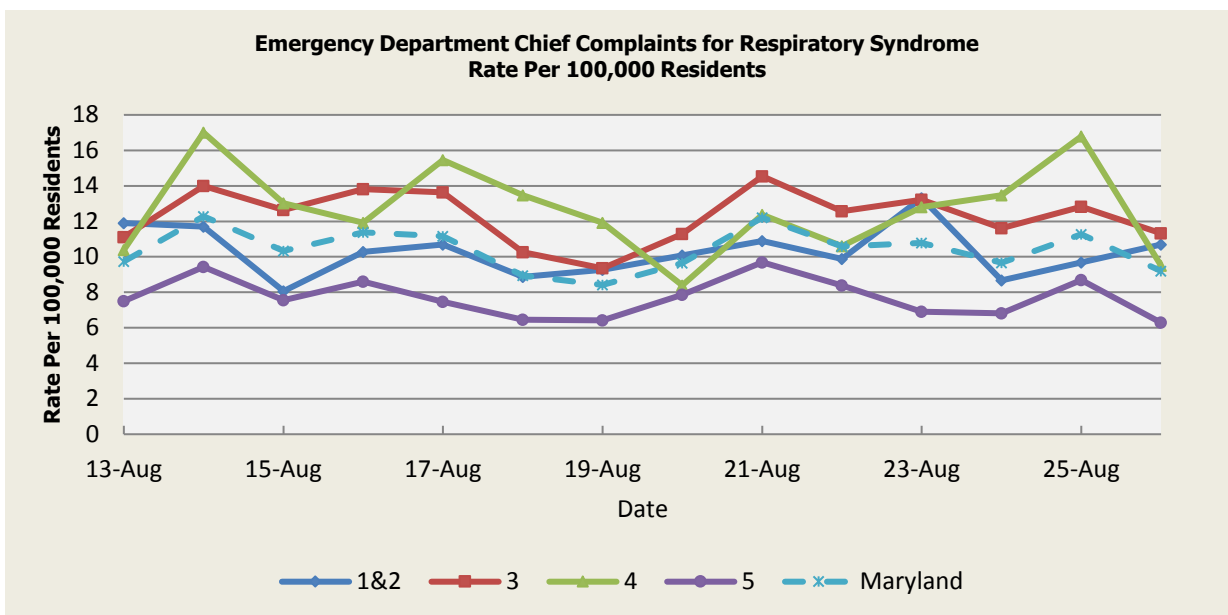
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were two (2) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis associated with a Daycare (Region 3); and one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.36	14.47	14.78	9.86	12.55
Median Rate*	12.91	14.80	15.02	10.22	12.95

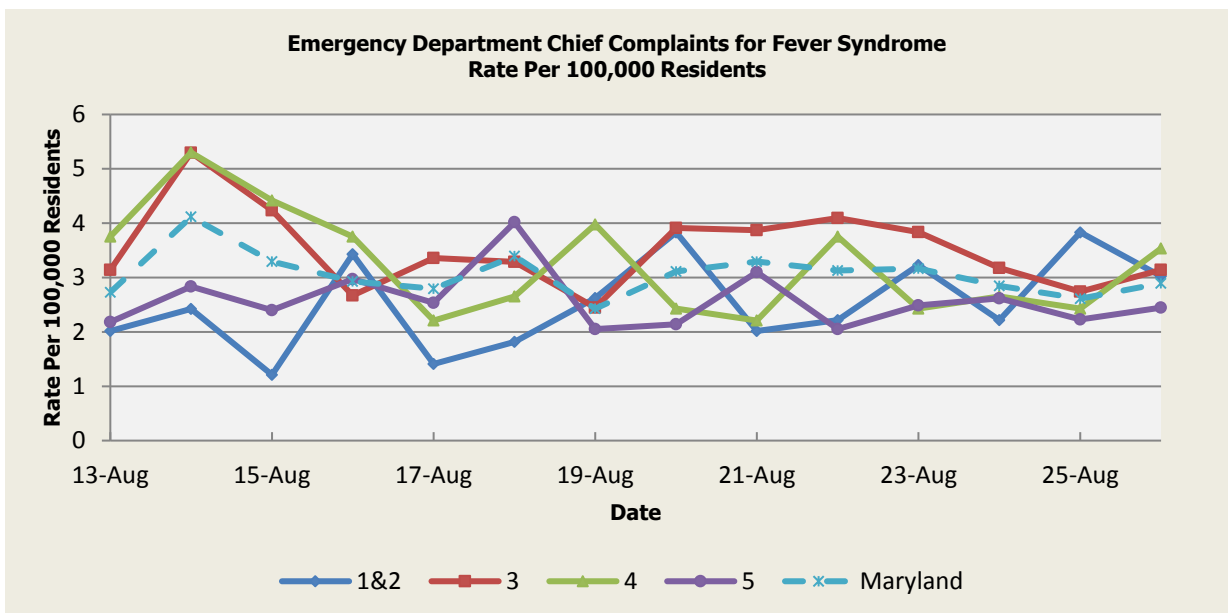
* Per 100,000 Residents



There were no Respiratory Syndrome outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.54	13.84	13.74	9.54	11.99
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

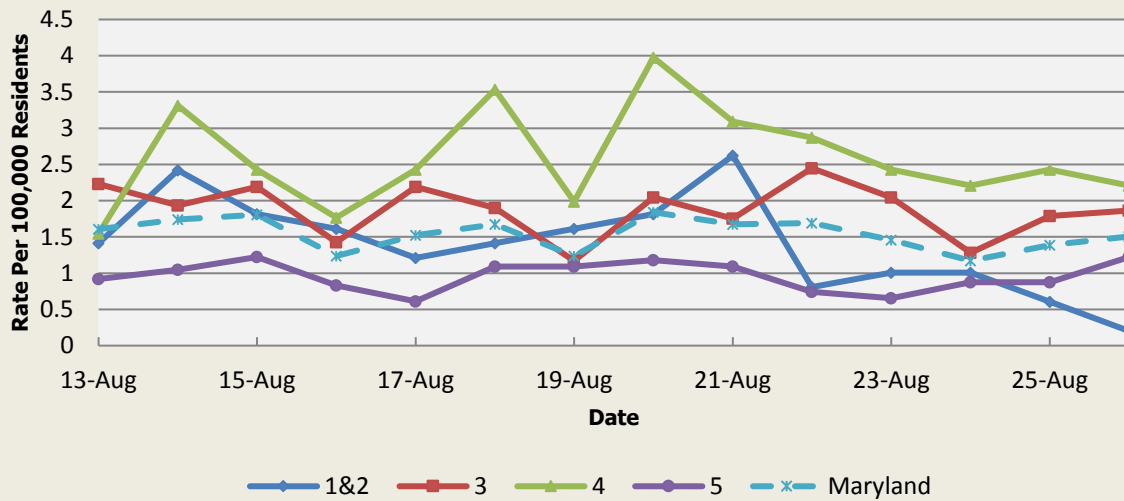


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.90	3.71	3.81	2.95	3.36
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



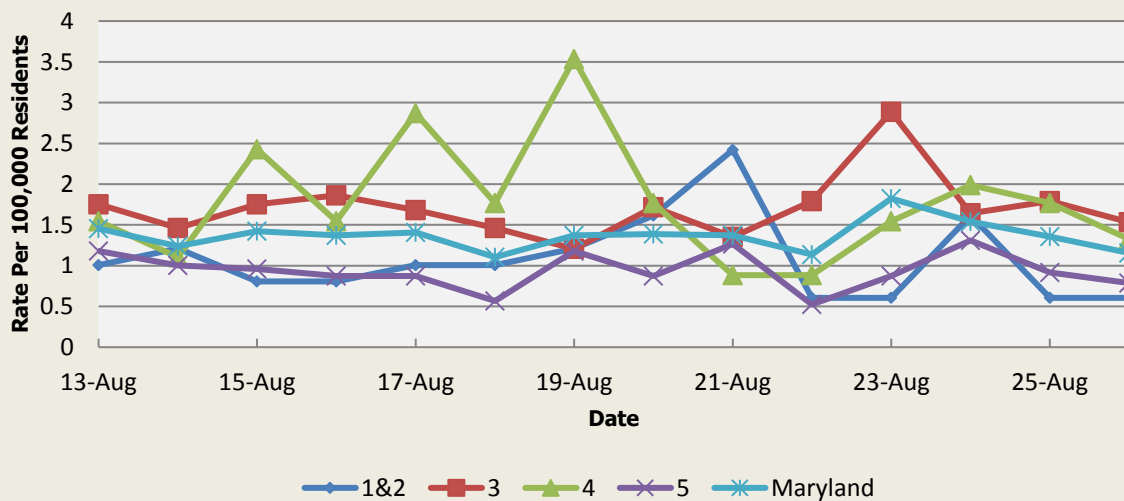
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.00	1.81	1.94	0.92	1.41
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

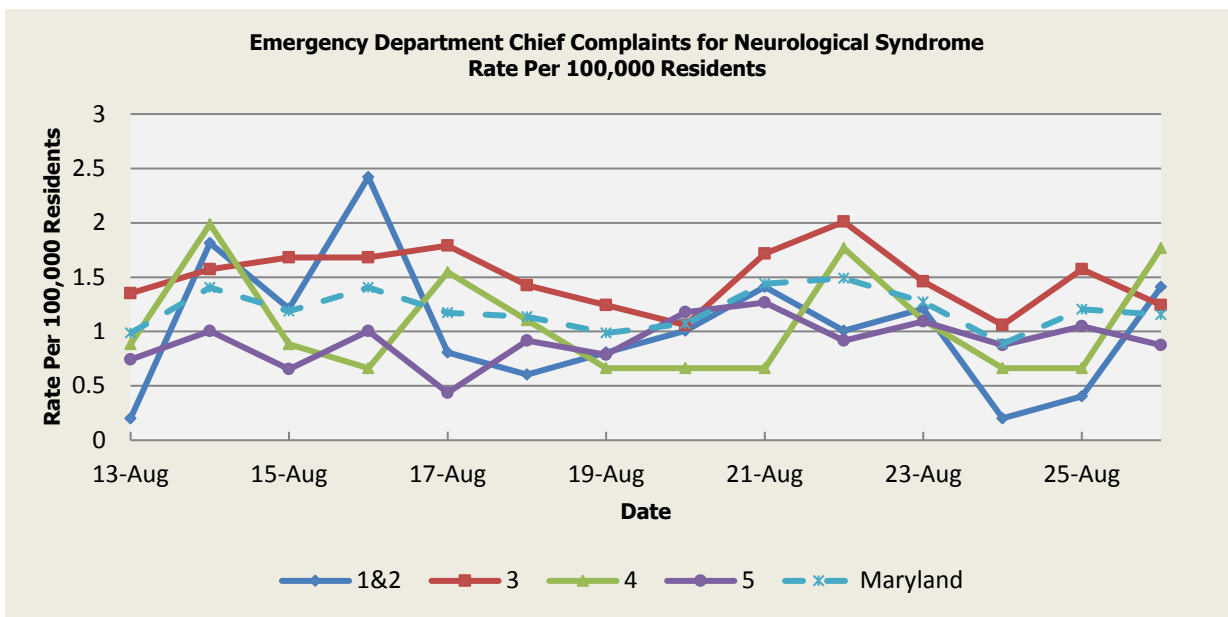


There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.19	1.68	1.69	0.98	1.37
Median Rate*	1.21	1.68	1.77	1.00	1.39

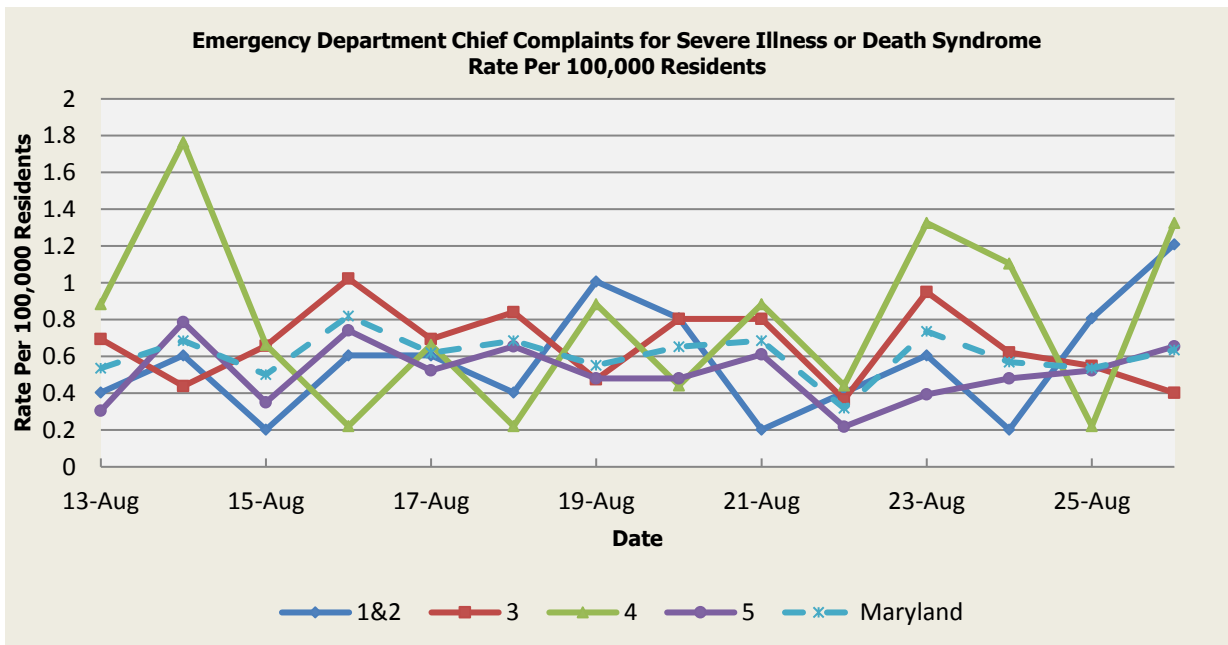
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.76	0.66	0.49	0.64
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

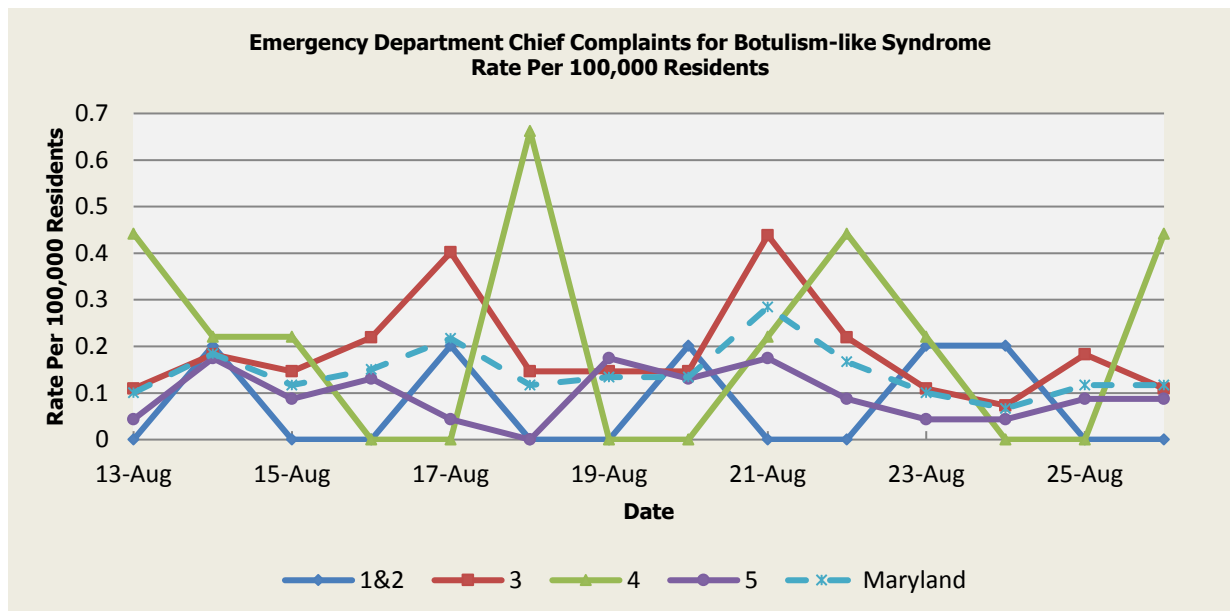


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.88	0.77	0.44	0.68
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

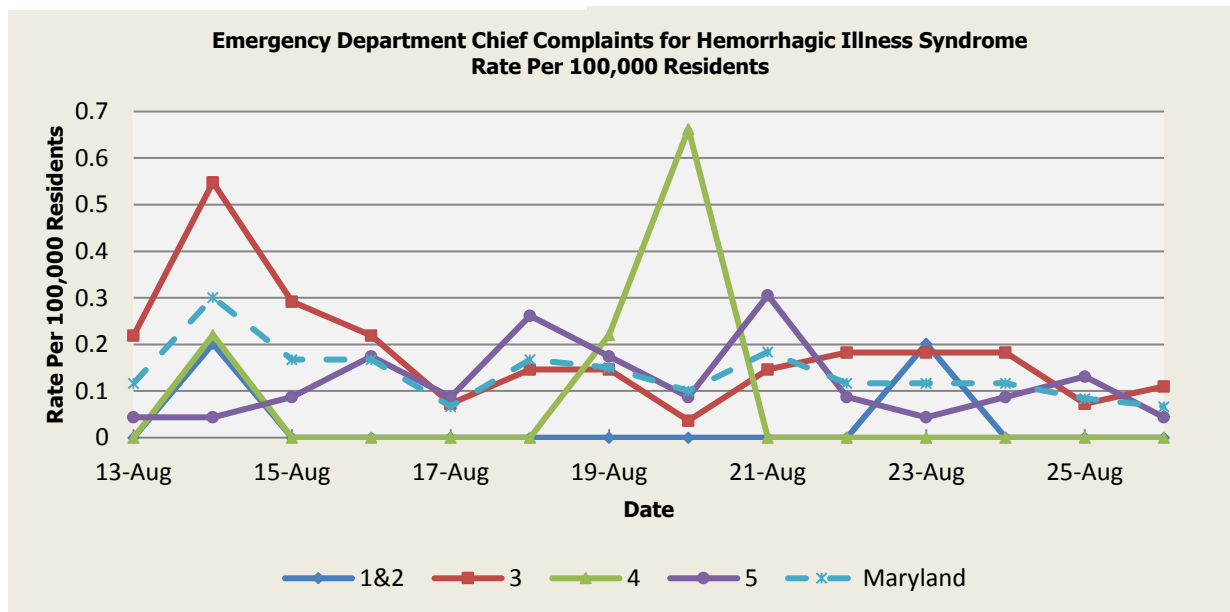
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 08/13 (Region 4), 08/14 (Regions 1&2,3,4,5), 08/15 (Region 4), 08/16 (Regions 3,5), 08/17 (Regions 1&2), 08/18 (Region 4), 08/19 (Region 5), 08/20 (Regions 1&2,5), 08/21 (Regions 3,4,5), 08/22 (Regions 3,4), 08/23 (Regions 1&2,4), 08/24 (Regions 1&2), 08/25 (Region 3), 08/26 (Region 4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

* Per 100,000 Residents

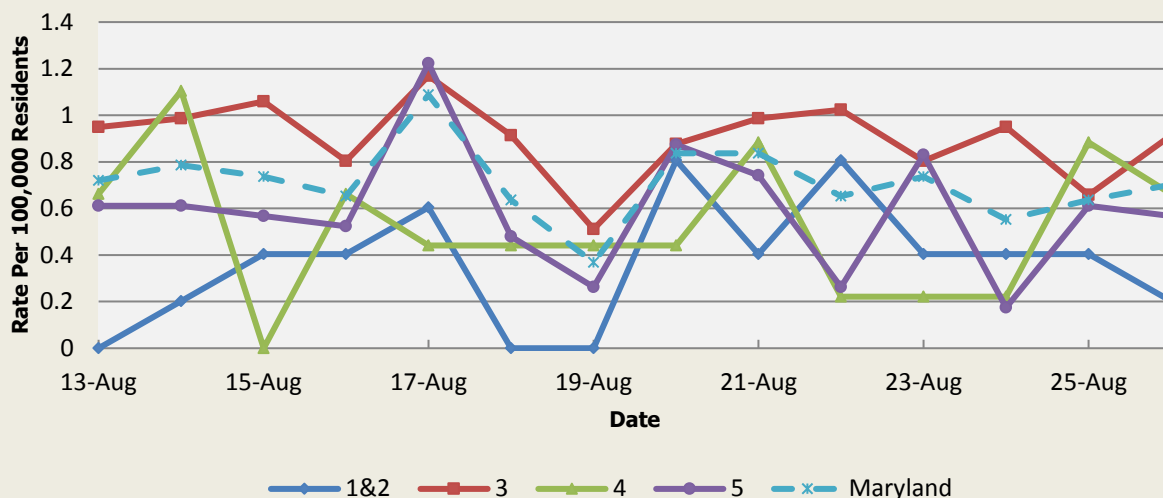


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 08/14 (Regions 1&2,3,4), 08/15 (Region 3), 08/18 (Region 5), 08/19 (Region 4), 08/20 (Region 4), 08/21 (Region 5), 08/23 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

Emergency Department Chief Complaints for Lymphadenitis Syndrome Rate Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 08/13 (Region 4), 08/15 (Regions 3,4), 08/16 (Region 4), 08/17 (Regions 1&2,3,5), 08/20 (Regions 1&2, 5), 08/21 (Regions 4,5), 08/22 (Regions 1&2,3), 08/23 (Region 5), 08/25 (Region 4), 08/26 (Region 4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.50	0.33	0.30	0.40
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

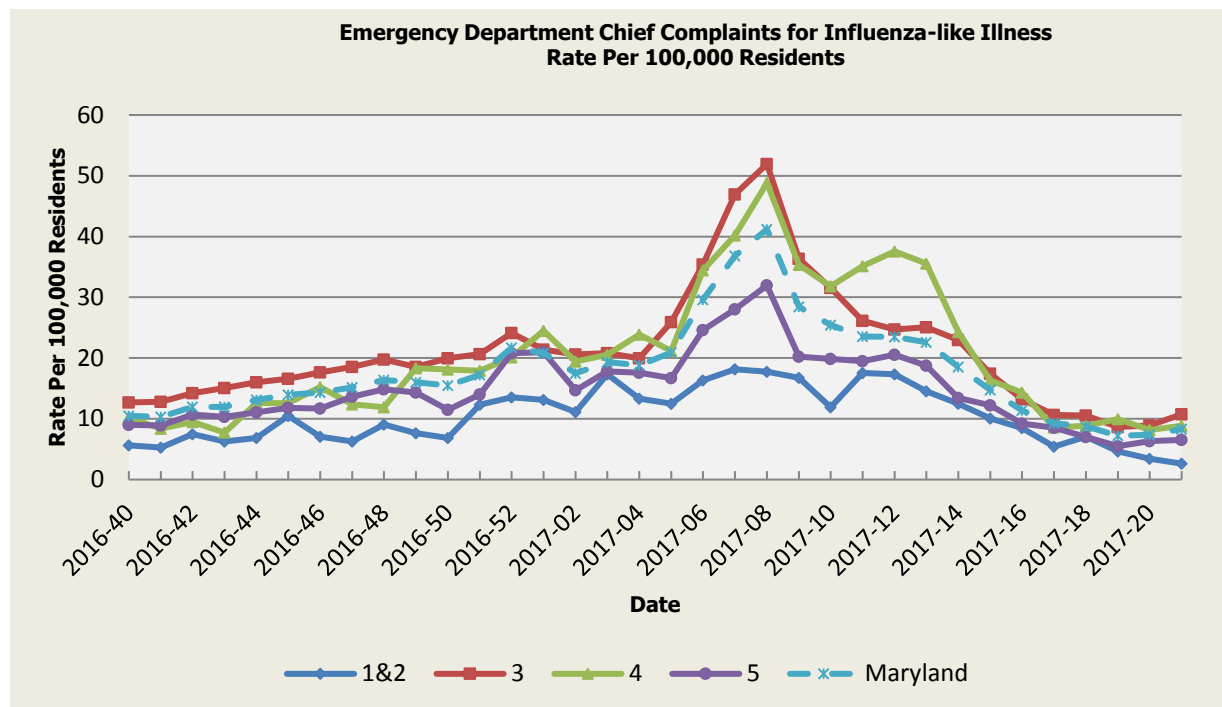
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	August			Cumulative (Year to Date)**		
	2017	Mean*	Median*	2017	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	41	47.2	41	236	290.4	261
Meningococcal disease	0	0.2	0	4	3.4	3
Measles	0	0.4	0	4	4.2	4
Mumps	1	2.6	1	23	37.4	15
Rubella	0	0.6	1	1	4.4	3
Pertussis	8	30.4	33	152	213	233
Foodborne Diseases						
Salmonellosis	81	122.4	117	550	632	639
Shigellosis	14	18	20	171	137.6	164
Campylobacteriosis	47	73.4	75	550	529.8	527
Shiga toxin-producing Escherichia coli (STEC)	13	15.4	12	119	103.8	97
Listeriosis	2	2.8	2	17	11.8	13
Arboviral Diseases						
West Nile Fever	1	5	4	3	8.8	8
Lyme Disease	276	291	299	2494	2194.6	2127
Emerging Infectious Diseases						
Chikungunya	0	1.2	0	0	4.2	0
Dengue Fever	6	3.4	3	16	19.8	14
Zika Virus***	0	2	0	1	10.8	6
Other						
Legionellosis	26	18.2	15	151	119.8	122

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of September 01, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 46.

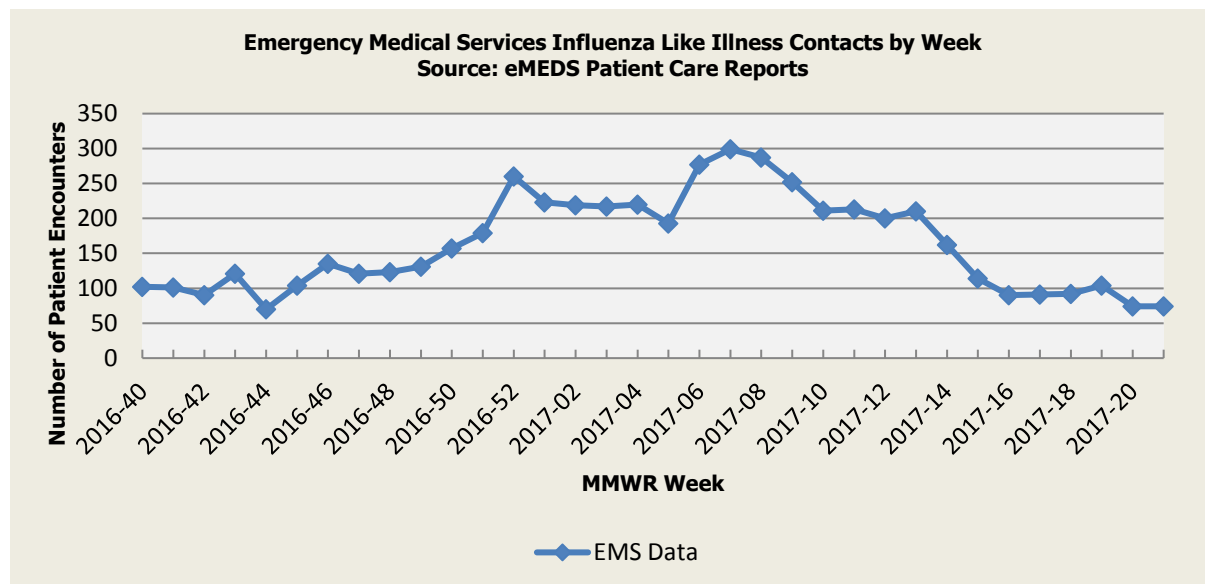
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



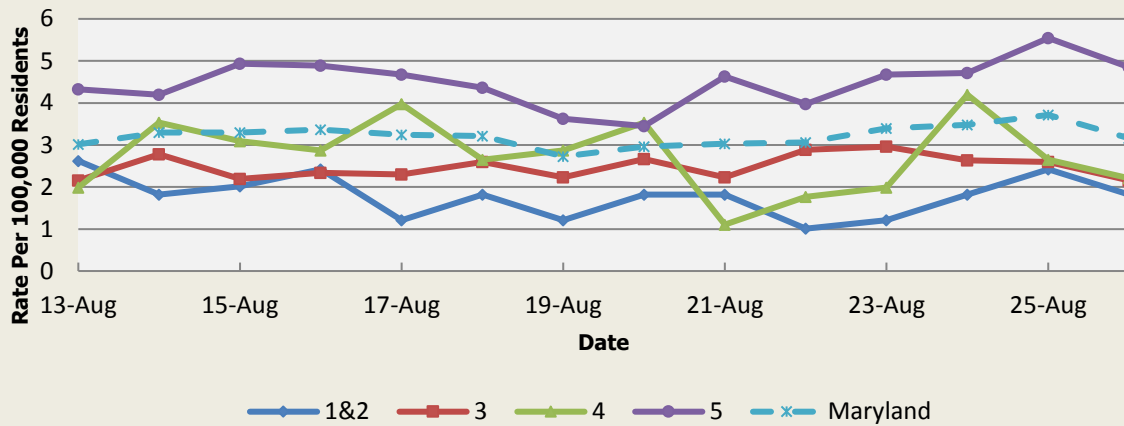
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

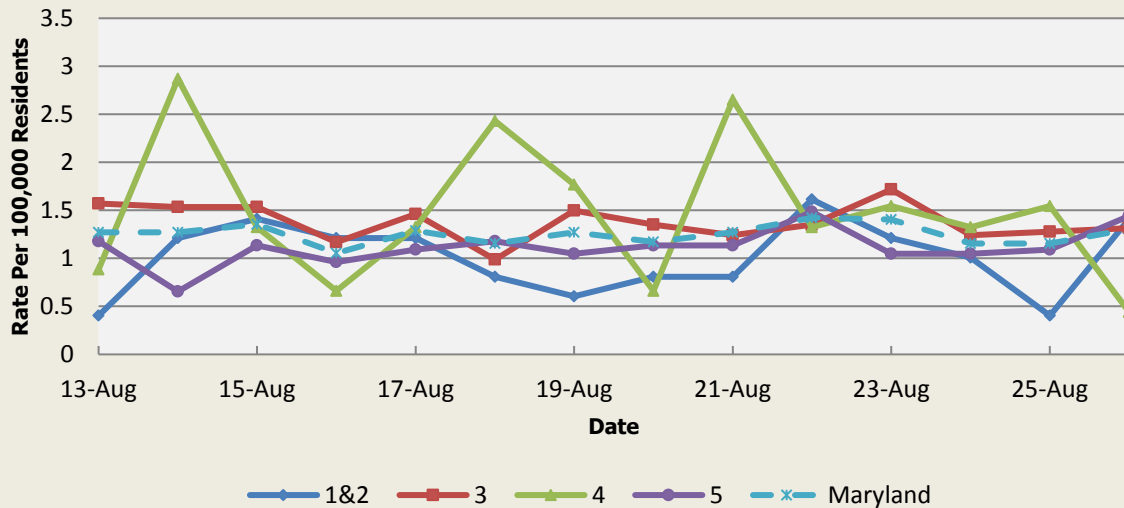


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.61	4.70	2.61	8.09	5.75
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



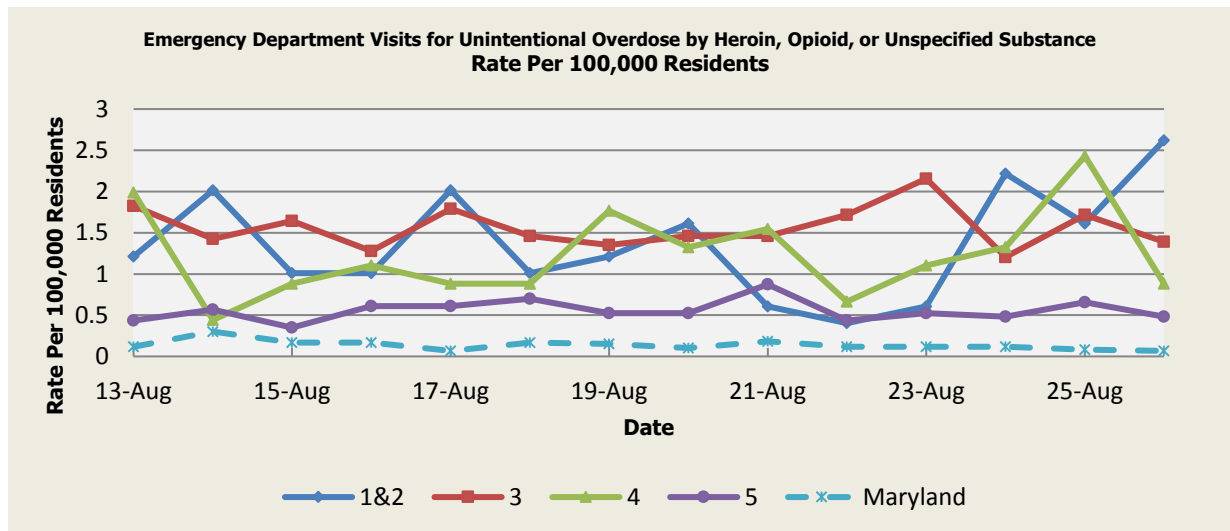
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.23	3.09	2.39	4.14	3.45
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

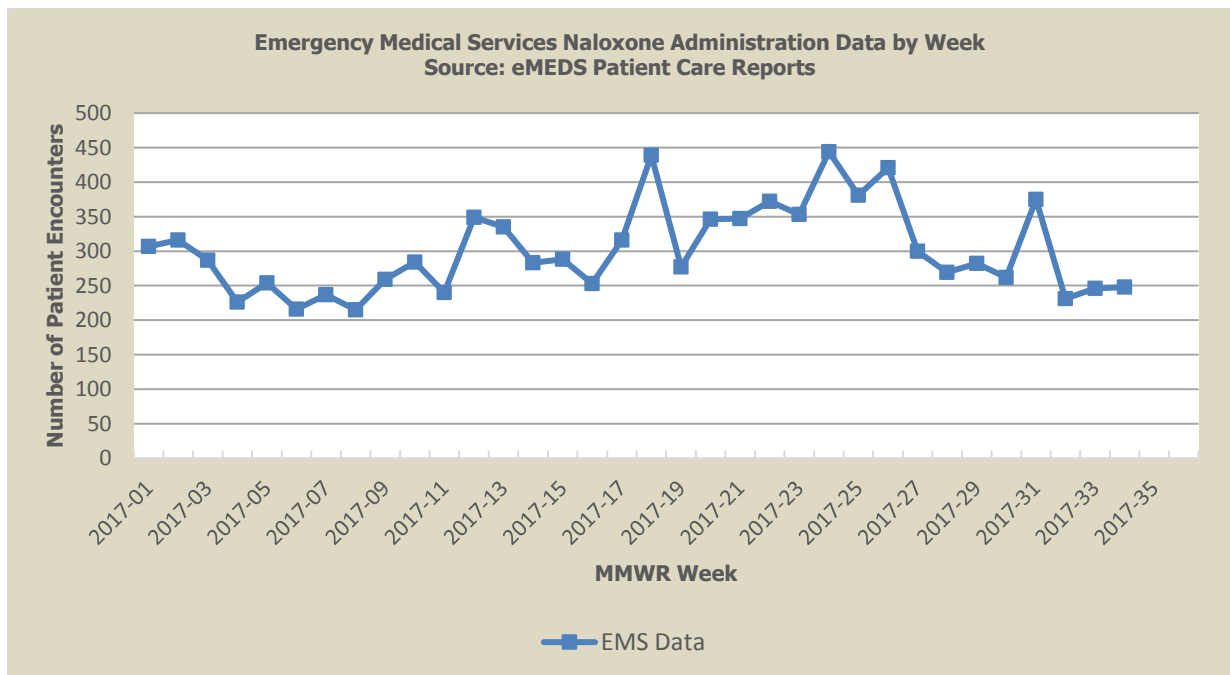
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



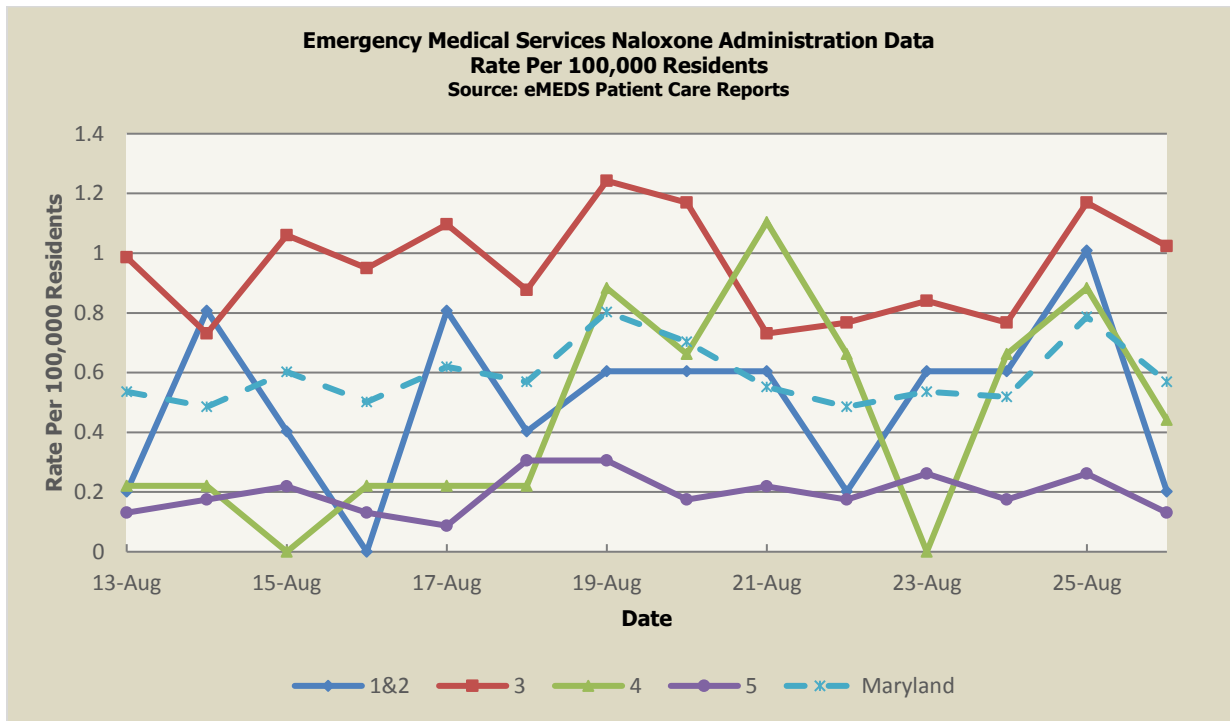
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 25, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

H5N8 (SOUTH AFRICA), 26 Aug 2017, South Africa has reported 8 more cases of the H5N8 highly pathogenic avian influenza. These new outbreaks bring the total number of outbreaks to 24 since [June 2017]: 10 outbreaks in commercial chickens, 3 outbreaks in commercial ostrich, 5 outbreaks in wild birds, 3 outbreak in birds that were kept as a hobby and 3 outbreaks in backyard poultry. Read More: <https://www.promedmail.org/post/5276756>

H5N8 (GERMANY), Highly pathogenic influenza A virus. The source and origin of the infection are unknown and inconclusive. Read More: <https://www.promedmail.org/post/5282824>

HUMAN AVIAN INFLUENZA:

There were no reports of human cases of avian influenza in the United States or internationally at the time that this report as compiled.

NATIONAL DISEASE REPORTS:

BRUCELLOSIS (MONTANA), 26 Aug 2017, Brucellosis has been found in a heifer within Montana's Designated Surveillance Area (DSA), according to the Montana Department of Livestock. The infected animal was first identified during voluntary herd testing on a Madison County ranch. Infection was confirmed by the National Veterinary Services Laboratory (NVSL) in Ames, Iowa (IA) by tissue culture following euthanasia of the animal. The ranch has been placed under quarantine and the department has initiated an epidemiological investigation. Testing of all other animals on the ranch is already under way. Read More: <https://www.promedmail.org/post/5275885>

EASTERN EQUINE ENCEPHALITIS (MULTI-STATE), 27 Aug 2017, A horse in Lowndes county has tested positive for eastern equine encephalitis [EEE], according to health officials. EEE is a rare disease caused by a virus spread by infected mosquitoes. Severe cases of EEE infection in humans begin with the sudden onset of headache, high fever, chills, and vomiting, according to CDC; the illness may then progress into disorientation, seizures, and coma. About a third of patients who develop EEE die, and many of those who survive have mild to severe brain damage. Read More: <https://www.promedmail.org/post/5277027>

HEPATITIS A (CALIFORNIA), 29 Aug 2017, Since early 2017, the Public Health Services Division, in the County of San Diego Health and Human Services Agency, has been investigating a local hepatitis A outbreak. The majority of people who have contracted hepatitis A are homeless and/or illicit drug users, although some cases have been neither. The outbreak is being spread person-to-person and through contact with a fecally contaminated environment. No common sources of food, beverage or drugs have been identified that have contributed to this outbreak, though investigation is ongoing. The Centers for Disease Control and Prevention (CDC) notes that person-to-person transmission through close contact is the primary way people get hepatitis A in the USA. Read More: <https://www.promedmail.org/post/5281598>

INTERNATIONAL DISEASE REPORTS:

HANTAVIRUS (PANAMA), 27 Aug 2017, The number of cases of hantavirus has risen to 14, since the Ministry of Health confirmed 3 new cases of fever and hantavirus cardiopulmonary syndrome. Carlos Muñoz, regional coordinator of epidemiology in Los Santos, stated that the 3 latest cases registered are a girl whose illness is yet to be confirmed as hantavirus fever, a 44-year-old woman resident of Via Hacia Santo Domingo with hantavirus cardiopulmonary syndrome. Read More: <https://www.promedmail.org/post/5276928>

MEASLES (EUROPE/JAPAN), 27 Aug 2017, Japan's health ministry has issued a warning for people traveling to Europe on the back of an outbreak of measles in countries such as Italy and Romania. The Ministry of Health, Labor and Welfare is advising tourists to go to hospital if they develop a high fever or generalized rash after returning to Japan. About 4100 patients in Italy and around 6500 patients in Romania have already been confirmed as of August 2017. Read More: <https://www.promedmail.org/post/5277324>

WEST NILE VIRUS (GREECE), 28 Aug 2017, A total of 37 cases have been detected this year, including a patient who is still in hospital in intensive care experts said. In most cases, patients suffered from mild symptoms. It was mainly elderly patients with other chronic illnesses who faced severe complication. Greek authorities said that 3 people in Greece infected with the West Nile virus died of complications related to the illness this summer, all of whom were over 70 years old. Read More: <https://www.promedmail.org/post/5276953>

CRIMEAN-CONGO FEVER (UGANDA), 28 Aug 2017, Uganda has been placed on high alert as the Ministry of Health investigates and monitors suspected cases of the deadly Crimean-Congo haemorrhagic fever in the central districts of Kiboga and Nakaseke. The ministry received blood samples of 2 patients from Kiboga and Nakaseke hospital suspected Crimean-Congo haemorrhagic fever. The patients tested positive for Crimean-Congo haemorrhagic fever. Read More: <https://www.promedmail.org/post/5276952>

MELIOIDOSIS (THAILAND), 28 Aug 2017, People living in flooded areas have been warned to keep time spent wading through water to a minimum lest they be infected with melioidosis, a disease that has claimed 21 lives in 2017. The disease, caused by the bacterium *Burkholderia pseudomallei* and prevalent during the rainy season in the subtropics, peaks every August in Thailand and has been wider spread this year. The bacterium thrives in contaminated water and soil and infects humans and animals through direct contact. People could become infected from prolonged exposure to contaminated water or soil, especially if they have any open sores or lesions in the skin. Infection can also come from consuming contaminated water or food. Read More: <https://www.promedmail.org/post/5279735>

ANTHRAX (INDONESIA), 28 Aug 2017, Cattle deaths due to anthrax bacteria re-spread in Gorontalo District. At least 25 cows owned by local residents were reported dead suddenly in Tumbuo Hamlet, Tenilo. Cow carcasses are feared will spread the bacteria to humans and can also kill more cows. Read More: <https://www.promedmail.org/post/5280045>

UNDIAGNOSED HEMORRHAGIC ILLNESS (MAURITANIA), 29 Aug 2017, A male patient is currently hospitalized at Hamed Ben Khalifa hospital in Boutilimit[Trarza region, 160 km [99 mi] southeast of Nouakchott, the same sources added, without specifying what type of haemorrhagic fever.

The Mauritanian Ministry of Health immediately dispatched a mission to Boutilimit, which carried out investigations to verify that no other person had been reached by the virus in the area from which the patient came. Read More: <https://www.promedmail.org/post/5280719>

MERS-COV (UNITED ARAB OF EMIRATES), 29 Aug 2017, WHO reported one new case of the virus. The patient is currently in ICU on mechanical ventilation. Investigations into the source of infection are ongoing. Globally, 2067 laboratory-confirmed cases of infection with MERS-CoV including at least 720 related deaths have been reported to WHO. Read More: <https://www.promedmail.org/post/5280997>

E. COLI EHEC (AUSTRALIA), 29 Aug 2017, Mild Illness during Outbreak of *Shiga Toxin-Producing E. coli O157* Infections Associated with Agricultural Show, Australia. Shiga toxin producing *E. coli STEC* or *enterohemorrhagic E. coli, EHEC - Mod. LL* is a major cause of serious human gastrointestinal illness and have the potential to cause life-threatening complications, such as hemolytic uremic syndrome. Read More: <https://www.promedmail.org/post/5282185>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: <http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

